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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,169	10/29/2003	You-Young Jung	1349.1266	7130
21171	7590	09/02/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			WALLING, MEAGAN S	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,169

Applicant(s)

JUNG, YOU-YOUNG

Examiner

Meagan S. Walling

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6 and 8-12 is/are allowed.
- 6) ☒ Claim(s) 13, 14 and 17 is/are rejected.
- 7) ☒ Claim(s) 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizusawa (US 5,400,083).

Regarding claim 13, Mizusawa teaches a motion detector detecting motion information values representing presence and absence of a motion for each pixel/block of an input nth image field (Ref. 15); and a motion calculator adjusting according to a formulaic value the detected motion information values of the input nth image field based upon motion information values of an input n+1th image field (column 3, line 48).

Regarding claim 14, Mizusawa teaches calculating a mixed valued (a) according to the adjusted detected motion information values of the input nth image field and outputs the mixed value to a deinterlacing processor outputting an image frame based upon the mixed value (column 5, lines 57-68).

2. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al. (US 4,731,651).

Regarding claim 17, Matsumoto et al. teaches removing spurious still regions and spurious motion regions during an image field motion detection, based upon a limited added to

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or a limited subtracted from, pixel motion information values of a current image field using only immediately preceding and succeeding image fields to the current image field (column 1, line 60 – column 2, line 5).

Allowable Subject Matter

3. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of allowability of claim 15 is the inclusion of the limitation that the deinterlacing processor mixes intra-field and inter-field interpolation outputs and the adjusted detected motion information values to output the image frame. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art of record that makes these claims allowable.

The primary reason for the indication of allowability of claim 15 is the inclusion of the limitation that the motion information values are adjusted according to a formula $V(i,j) = V(i,j) + T1$ or a formula $V(i,j) = V(i,j) - T2$, and wherein the $V(i,j)$ represents a motion information value for j th pixel on line i th of the input n th image field, and $T1$ and $T2$ are random first and second values within a predetermined range, respectively. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art of record that makes these claims allowable.

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4. Claims 2-6 and 8-12 are allowed.

The following is an examiner's statement of reasons for allowance: Please see the previous office action and applicant's response for reasons for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meagan S. Walling whose telephone number is (571) 272-2283.

The examiner can normally be reached on Monday through Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is ~~703-872-9306~~ **571-273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msw

BRYAN BUI
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Bryan Bui', with a stylized flourish at the end.